

Amendments to the Claims

Please amend Claims 1, 3, 8-10, 15 and 17-20 as follows.

1. (Currently Amended) A printing apparatus which performs printing by using a printhead having a printing element for performing printing on a target printing medium, comprising:

command generation means for outputting a command for setting data for causing the printhead to perform predetermined processing;

a carriage which supports the printhead and scans the printhead on the target printing medium; and

control means, arranged on ~~the~~ said carriage, for receiving the command generated by said command generation means and outputting a control signal corresponding to the data set in accordance with the command to the printhead, thereby controlling the printhead.

2. (Original) The apparatus according to claim 1, wherein
the printhead comprises storage means for storing feature information,
said command generation means outputs a command for acquiring specific information from information held by the printhead, and

said control means receives the command generated by said command generation means, accesses the storage means of the printhead, and acquires specific information corresponding to the command from the storage means.

3. (Currently Amended) The apparatus according to claim 2, wherein said control means ~~comprises~~ comprises:

conversion means for converting the command generated by said command generation means into an access signal containing an address for reading out information specified by the command from the storage means, and

acquisition means for accessing the storage means in response to the access signal obtained by the conversion means, and acquiring the specific information.

4. (Original) The apparatus according to claim 3, wherein the conversion means has, in correspondence with each of a plurality of types of printheads, a table which makes the information specified by the command and a storage address correspond to each other, and generates the access signal by looking up a table corresponding to a mounted printhead.

5. (Original) The apparatus according to claim 1, wherein the command generated by said command generation means includes a command for driving and controlling the printhead.

6. (Original) The apparatus according to claim 1, wherein said command generation means is arranged in said carriage, interprets an input sequence instruction, generates a command for causing the printhead to perform predetermined processing, and outputs the command to the printhead.

7. (Original) The apparatus according to claim 6, wherein said command generation means generates a second command on the basis of a result acquired from the printhead in accordance with a first command, and outputs the second command to the printhead.

8. (Currently Amended) The apparatus according to claim 1, wherein the printing element ~~has~~ comprises a heating element, and performs printing by discharging ink from an orifice arranged in correspondence with the heating element.

9. (Currently Amended) A printhead having a plurality of printing elements for performing printing, comprising:

reception means for receiving a command for setting data for causing the printhead to perform predetermined processing;

generation means for generating a control signal corresponding to the data set in accordance with the command received by said reception means; and

control means for performing control in accordance with the control signal generated by said generation means.

10. (Currently Amended) The printhead according to claim 9, ~~wherein~~ ~~the print head further comprises~~ comprising storage means for storing feature information, ~~and wherein~~ said control means acquires specific information from said storage means in accordance with the command, and externally outputs the specific information.

11. (Original) The printhead according to claim 10, wherein
said generation means comprises conversion means for converting the
command received by said reception means into an access signal containing an address for
reading out information specified by the command from said storage means, and
said control means accesses said storage means in response to the access
signal obtained by the conversion means, and acquires corresponding specific information.

12. (Original) The printhead according to claim 11, wherein the
conversion means has a table which makes the information specified by the command and
a storage address in said storage means correspond to each other, and generates the access
signal by looking up the table.

13. (Original) The printhead according to claim 9, wherein said
generation means generates a control signal for driving and controlling the printhead on the
basis of the command received by said reception means.

14. (Original) The printhead according to claim 13, wherein said
generation means generates a second command on the basis of a result of executing
processing by said control means in accordance with a generated first command, and
outputs the second command to said control means.

15. (Currently Amended) The printhead according to claim 9, wherein a heating ~~element is~~ elements are used as the printing ~~element~~, elements, and printing is performed by discharging ink from ~~an orifice~~ orifices arranged in correspondence with the heating ~~element~~ elements.

16. (Original) An element base for a printhead having a plurality of printing elements for performing printing and a driving control circuit for selectively driving the plurality of printing elements, comprising:

reception means for receiving an externally input command; and

control means for performing control corresponding to the command received by said reception means.

17. (Currently Amended) A method of controlling a printing apparatus including a printhead having a printing element for performing printing and storage means for storing feature information, a first control ~~unit~~ unit, which controls the printing apparatus, and a second control ~~unit~~ unit, which is mounted on a cartridge for carrying the printhead or arranged in the printhead, and can operate independently of the first control unit, said method comprising:

a command generation step of causing the first control unit to generate a command for setting data for acquiring specific information from information held by the printhead; and

a control step of causing the second control unit to receive the command generated in ~~the~~ said command generation step, access the storage means of the printhead based on the data set in accordance with the command, and acquire the specific information corresponding to the command from the storage means.

18. (Currently Amended) The method according to claim 17, wherein the second control means is arranged on an element base for the printhead, the element base having the printing element for performing printing ~~in the printhead~~ and the storage means for storing feature information.

19. (Currently Amended) A liquid discharge apparatus which discharges a liquid by using a liquid discharge head having a liquid discharge element for discharging a liquid, comprising:

command generation means for outputting a command for setting data for causing the liquid discharge head to perform predetermined processing;

head mounting means for mounting the liquid discharge head; and

control means, arranged on ~~the~~ said head mounting means, for receiving the command generated by said command generation means and outputting a control signal corresponding to the data set in accordance with the command, thereby controlling the liquid discharge head.

20. (Currently Amended) A liquid discharge head having a liquid discharge element for discharging a liquid, comprising:

reception means for receiving a command for setting data for causing the liquid discharge head to perform predetermined processing;

generation means for generating a control signal corresponding to the data set in accordance with the command received by said reception means; and

control means for performing control corresponding to the control signal generated by said generation means.

21. (Original) An element base for a liquid discharge head having a plurality of liquid discharge elements for discharging a liquid and a driving control circuit for selectively driving the plurality of liquid discharge elements, comprising:

reception means for receiving an externally input command; and

control means for performing control corresponding to the command received by said reception means.